

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 09/14/2018

Reviewed on 09/14/2018

* 1 Identification

• **Product Identifier**

• **Trade Name:** Lab Clean™

• **Product Number:** 15-4100

• **Relevant identified uses of the substance or mixture and uses advised against:**

• **Product Description:**

Lab Clean™ is a DNA decontamination solution available as a concentrate for routine laboratory cleaning to eliminate DNA from large areas like room floors and is based on a non-carcinogenic DNA destroying chemistry.

• **Details of the Supplier of the Safety Data Sheet:**

• **Manufacturer/Supplier:**

Minerva Biolabs Inc.
350 Fifth Avenue #5220,
New York, NY 10118, USA
Phone: 1-908-524-4661
www.minervabiolabs.us

• **Emergency telephone number:** 1-908-524-4661

2 Hazard(s) Identification

• **Classification of the substance or mixture:**



Corrosion

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Aquatic Acute 2 H401 Toxic to aquatic life.

• **Label elements:**

• **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

• **Hazard pictograms:**



GHS05

• **Signal word:** Danger

• **Hazard-determining components of labeling:**

Phosphoric acid

• **Hazard statements:**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H401 Toxic to aquatic life.

• **Precautionary statements:**

P234 Keep only in original container.

P260 Do not breathe dusts or mists.

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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- 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.
- P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
- P363 Wash contaminated clothing before reuse.
- P390 Absorb spillage to prevent material damage.
- P405 Store locked up.
- P406 Store in corrosive resistant container with a resistant inner liner.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

• **Unknown acute toxicity:**

This value refers to knowledge of known, established toxicological or ecotoxicological values.
0 % of the mixture consists of component(s) of unknown toxicity.

• **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

• **NFPA ratings (scale 0 - 4)**



• **HMIS-ratings (scale 0 - 4)**



• **Hazard(s) not otherwise classified (HNOC):** None known

*** 3 Composition/Information on Ingredients**

• **Chemical characterization: Mixtures**

• **Description:** Mixture of substances listed below with non-hazardous additions.

• **Dangerous Components:**

CAS: 7664-38-2	Phosphoric acid	<60%
RTECS: TB 6300000	☞ Met. Corr.1, H290; Skin Corr. 1B, H314	
CAS: 68439-50-9	Alcohols, C12-14, ethoxylated	<10%
	☞ Eye Dam. 1, H318; ☞ Aquatic Acute 1, H400; Aquatic Chronic 3, H412	

• **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

*** 4 First-Aid Measures**

• **Description of first aid measures**

• **General information:** Immediately remove any clothing soiled by the product.

• **After inhalation:**

In case of inhalation of aerosols/spray mist/splash spots: Consult physician. Provide fresh air.

• **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation occurs, consult a doctor.

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- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse mouth with water.
Never give anything by mouth to an unconscious person.
Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

* 5 Fire-Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters**
- **Special protective equipment for firefighters:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

* 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:**
Avoid contact with skin, eyes and clothing.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

• **PAC-1:**

7664-38-2	Phosphoric acid	3 mg/m ³
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• **PAC-2:**

7664-38-2	Phosphoric acid	30 mg/m ³
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• **PAC-3:**

7664-38-2	Phosphoric acid	150 mg/m ³
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* 7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**
Keep away from sources of ignition.

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Avoid contact with skin, eyes and clothing

Avoid contact with eyes. Avoid repeated or prolonged contact with skin.

Ensure good ventilation/exhaustion at the workplace.

- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool, dry place.
Protect from heat and direct sunlight.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

* 8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**
- **Components with occupational exposure limits:**
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

7664-38-2 Phosphoric acid

PEL	Long-term value: 1 mg/m ³
REL	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
TLV	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Select glove material based on penetration times, rates of diffusion and degradation.

- **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

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• **Penetration time of glove material:**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

• **Eye protection:**



Tightly sealed goggles

• **Body protection:**



Protective work clothing

• **Limitation and supervision of exposure into the environment:**

Keep away from drains, surface and ground waters.
Avoid release into the environment.

* 9 Physical and Chemical Properties

• **Information on basic physical and chemical properties**

• **General Information**

• **Appearance:**

Form:

Liquid

Color:

Clear

• **Odour:**

Odorless

• **Odor threshold:**

Not determined.

• **pH-value:**

1.9

• **Change in condition**

Melting point/Melting range:

-20 °C (-4 °F)

Boiling point/Boiling range:

≥100 °C (≥212 °F)

• **Flash point:**

None

• **Flammability (solid, gaseous):**

Not applicable.

• **Ignition temperature:**

Not applicable

• **Decomposition temperature:**

Not determined.

• **Auto igniting:**

Product is not self-igniting.

• **Danger of explosion:**

Product does not present an explosion hazard.

• **Explosion limits:**

Lower:

Not determined.

Upper:

Not determined.

• **Vapor pressure @ 20 °C (68 °F):**

≤23 hPa (≤17.3 mm Hg)

• **Density @ 20 °C (68 °F):**

1.36 g/cm³ (11.3492 lbs/gal)

• **Relative density:**

Not determined.

• **Vapor density:**

Not determined.

• **Evaporation rate:**

Not determined.

• **Solubility in / Miscibility with:**

Water:

Fully miscible.

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- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Other information:** No further relevant information available.

*** 10 Stability and Reactivity**

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** Thermal decomposition can lead to the escape of irritating gases and vapours.
- **Incompatible materials:** Alkalis (alkalis), concentrated, Alkali metals.
- **Hazardous decomposition products:** No dangerous decomposition products known.

*** 11 Toxicological Information**

- **Information on toxicological effects:**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

7664-38-2 Phosphoric acid

Oral	LD50	>5,000 mg/kg (Rat) (OECD Test Guideline 423)
Dermal	LD50	2,740 mg/kg (Rabbit)
Remarks: Behavioral: Somnolence (general depressed activity). Behavioral: Excitement.		

68439-50-9 Alcohols, C12-14, ethoxylated

Oral	LD50	9,350 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rat)

- **Primary irritant effect:**
- **On the skin:** Corrosive effect on skin and mucous membranes. Corrosive to skin and mucous membranes.
- **On the eye:** Corrosive effect.
- **Additional toxicological information:** The product shows the following dangers according to internally approved calculation methods for preparations:
Corrosive
Swallowing will lead to a corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· **Carcinogenic categories:**

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

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*** 12 Ecological Information**

- **Toxicity:**
- **Aquatic toxicity:**
Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

7664-38-2 Phosphoric acid	
EC50	4.6 mg/l (Daphnia)
68439-50-9 Alcohols, C12-14, ethoxylated	
EC50	0.5 mg/l (Green algae)
	0.8 mg/l (Water flea)

- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Generally not hazardous for water.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
Poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packaging**
- **Recommendation:** Disposal must be made according to official regulations.

*** 14 Transport Information**

- **UN-Number:**
- **DOT, ADR/ADN, IMDG, IATA** UN1805
- **UN proper shipping name:**
- **DOT** Phosphoric acid solution
- **ADR/ADN** UN1805 Phosphoric acid solution
- **IMDG, IATA** PHOSPHORIC ACID, SOLUTION
- **Transport hazard class(es):**
- **DOT**



- **Class:** 8 Corrosive substances

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· **Label:** 8

· **ADR/ADN**



· **Class:** 8 (C2) Corrosive substances
· **Label:** 8

· **IMDG, IATA**



· **Class:** 8 Corrosive substances
· **Label:** 8
· **Packing group:**
· **DOT, ADR/ADN, IMDG, IATA** III
· **Environmental hazards:** Not applicable.
· **Special precautions for user:** Warning: Corrosive substances
· **Danger code (Kemler):** 80
· **EMS Number:** F-A,S-B
· **Segregation groups:** Acids
· **Stowage Category** B
· **Segregation Code** SG20 Stow "away from" acids
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
· **Transport/Additional information:**
· **DOT**
· **Quantity limitations:** On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L

· **ADR/ADN**

· **Excepted quantities (EQ):** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

· **IMDG**

· **Limited quantities (LQ):** 5L
· **Excepted quantities (EQ):** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":** UN 1805 PHOSPHORIC ACID SOLUTION, 8, III

15 Regulatory Information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
· **SARA (Superfund Amendments and Reauthorization):**

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

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<ul style="list-style-type: none"> • Section 313 (Specific toxic chemical listings): 		
7664-38-2	Phosphoric acid	
<ul style="list-style-type: none"> • TSCA (Toxic Substances Control Act): 		
All ingredients are listed or exempt from listing.		
<ul style="list-style-type: none"> • California Proposition 65: 		
<ul style="list-style-type: none"> • Chemicals known to cause cancer: 		
None of the ingredients are listed.		
<ul style="list-style-type: none"> • Chemicals known to cause reproductive toxicity for females: 		
None of the ingredients are listed.		
<ul style="list-style-type: none"> • Chemicals known to cause reproductive toxicity for males: 		
None of the ingredients are listed.		
<ul style="list-style-type: none"> • Chemicals known to cause developmental toxicity: 		
None of the ingredients are listed.		
<ul style="list-style-type: none"> • New Jersey Right-to-Know List: 		
7664-38-2	Phosphoric acid	
<ul style="list-style-type: none"> • New Jersey Special Hazardous Substance List: 		
7664-38-2	Phosphoric acid	CO
<ul style="list-style-type: none"> • Pennsylvania Right-to-Know List: 		
7664-38-2	Phosphoric acid	
<ul style="list-style-type: none"> • Pennsylvania Special Hazardous Substance List: 		
7664-38-2	Phosphoric acid	E
<ul style="list-style-type: none"> • Carcinogenic categories: 		
<ul style="list-style-type: none"> • EPA (Environmental Protection Agency): 		
None of the ingredients are listed.		
<ul style="list-style-type: none"> • TLV (Threshold Limit Value established by ACGIH): 		
None of the ingredients are listed.		
<ul style="list-style-type: none"> • NIOSH-Ca (National Institute for Occupational Safety and Health): 		
None of the ingredients are listed.		

- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS05

- **Signal word:** Danger
- **Hazard-determining components of labeling:**
Phosphoric acid
- **Hazard statements:**
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H401 Toxic to aquatic life.

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- P234 Keep only in original container.
- P260 Do not breathe dusts or mists.
- P264 Wash thoroughly after handling.
- P273 Avoid release to the environment.
- 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.
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- P310 Immediately call a poison center/doctor.
- P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
- P363 Wash contaminated clothing before reuse.
- P390 Absorb spillage to prevent material damage.
- P405 Store locked up.
- P406 Store in corrosive resistant container with a resistant inner liner.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

None of the ingredients are listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of preparation / last revision:** 09/14/2018 / 6

· **Abbreviations and acronyms:**

- ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMS: Hazardous Materials Identification System (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety and Health
- OSHA: Occupational Safety & Health Administration
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- Met. Corr. 1: Corrosive to metals – Category 1
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- Skin Corr. 1C: Skin corrosion/irritation – Category 1C
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

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Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

• *** Data compared to the previous version altered.**

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